

MATERIAL SAFETY DATA SHEET

Trade Name: Liquid Laundry Sour #8803

Prepared: September 21, 2000

Revised: March 2004

Section I: - Source Information

Manufacturer's Name: Michigan State Industries, Inc.
Address: Scott Correctional Facility
Emergency Phone: (734) 459-7400 x311 / 320
(800) 222-1222 Poison Control
Technical Information: (734) 459-7400 x311 / 320
Chemical Name: Acid

Section II - Hazardous Ingredients/Identify Information

<u>Hazardous Components</u>	<u>CAS No.</u>	<u>OSHA PEL*</u>	<u>ACGIH TLV*</u>
Oxalic Acid	144-62-7	1 mg/m ³	1 mg/m ³
Phosphoric Acid	7664-38-2	1 mg/m ³	

*Exposure limits expressed as eight-hour time-weighted average concentrations in parts of contaminant per million parts of air by volume (ppm). "Other Limits" are recommended by the National Institute for Occupational Safety and Health (NIOSH) and are time-weighted over ten hours unless otherwise specified.

Section III - Physical/Chemical Characteristics

<u>Boiling Point:</u>	>212 °F	<u>Specific Gravity:</u>	1.01
<u>Vapor Pressure:</u>	0.03 mm	<u>Vapor Density:</u>	
<u>Evaporation Rate: (Ethyl Ether = 1):</u>		<u>Solubility in Water:</u>	100%
<u>Appearance and Color:</u>	Clear liquid with slight odor		

Section IV- Fire and Explosion Hazard Data:

Flash Point: None Flammable Limits: LEL: N/A UEL: N/A
Extinguishing Media: Carbon dioxide, dry chemical
Special Fire Fighting Procedures: Fire fighters should wear self-contained breathing apparatus and protective clothing.
Unusual Fire and Explosion Hazards:

Section V - Reactivity Data:

Stability: STABLE Incompatibility (Conditions to avoid): Strong oxidizers, caustics and most metals especially silver compounds. Reactions with furfuryl alcohol, Chlorites. DO NOT MIX WITH BLEACH OR AMMONIA.
Hazardous Polymerization: None known
Hazardous Decomposition Products: When heated to decomposition emits acrid smoke and irritating fumes.

NFPA 704

Health -	3	HAZARDS 4 - Extreme 3 - Severe 2 - Moderate 1 - Slight 0 - None
Fire -	0	
Reactivity-	1	

Section VI - Health Hazard Data:

Routes of Entry: Contact, inhalation, ingestion

Health Hazards: *Acute:* Corrosion of the mouth, esophagus and stomach

Chronic: Removal of calcium in the blood, kidney stones, albuminuria, weight loss, increasing weakness and nervous system complaints, ulceration of the mucous membranes, epistaxis, headache, irritation and nervousness

Target Organs: Eye, skin, respiratory system, kidneys

Carcinogenicity: *NTP:* No *IARC:* No *OSHA:* No

Signs and Symptoms of Exposure: Severe eye and upper respiratory irritation, vomiting, burning, abdominal pain, collapse, and sometimes convulsions. Dermatitis, pulmonary edema, bluish skin, shock, kidney damage

Medical Conditions Generally Aggravated by Exposure:

Emergency and First Aid Procedures:

Eye: If this product contacts the eyes, immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention immediately.

Swallow: If this product has been swallowed, get medical attention immediately.

Skin: If this product contacts the skin, immediately flush the contaminated skin with water. If this product penetrates the clothing, immediately remove the clothing and flush the skin with water. Get medical attention promptly.

Breathing: If a person breathes large amounts of this product, move the exposed person to fresh air at once. If breathing has stopped, perform mouth-to-mouth resuscitation. Keep the affected person warm and at rest. Get medical attention as soon as possible.

Section VII - Precautions for Safe Handling and Use

Steps to be taken in Case of Material Release or Spill: Don protective clothing. Contain and absorb spilled material, dispose of properly. Large spill may be collected using vacuum equipment, dispose of unusable material properly.

Waste Disposal Method: This product does exhibit the hazardous characteristics of corrosive listed in 40CFR 261, Subpart C. It is not listed in the federal hazardous waste regulations 40CFR 261.33, paragraphs (e) or (f), i.e. chemical products that are considered hazardous if they become wastes. State or local hazardous waste regulations may apply if different from federal.

Precautions to be taken in Handling and Storing:

Other Precautions:

Section VIII - Control Measures:

Respiratory Protection: 25 mg/m³: Continuous flow supplied air or powered air purifying respiratory; 50 mg/m³: Air purifying respiratory with high efficiency particulate filter or supplied air

Ventilation: Mechanical ventilation to keep atmosphere below regulatory levels

Protective Gloves: Acid resistant gloves

Eye Protection: Wear appropriate glasses, goggles or face shield to prevent eye contact.

Other Protective Clothing or Equipment: Wear appropriate personal protective clothing to

prevent skin contact.

Work/Hygienic Practices: Remove protective clothing when wet or contaminated. Change protective clothing daily. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance; this is irrespective of the recommendation involving the wearing of eye protection. Facilities for a quick drenching the body should be provided within the immediate work area for emergency use where there is possibility of exposure.

Section IX-Additional Information:

DOT Shipping Name: Phosphoric Acid Solution, 8, UN1805, PG III

Hazard Class: Corrosive

This product contains the following compounds which are subject to the reporting requirements of Section 313 of Title III of SARA and 40 CFR 372:

<u>Constituent</u>	<u>CAS #</u>	<u>Concentration</u>
Phosphoric Acid	7664-38-2	48%

This notification of reporting requirements cannot be removed from this MSDS and the copying and redistribution of this document must include this notice.

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originated with Michigan State Industries, Inc. or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.